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CONTENTS

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UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION

FUNDAMENTAL EDUCATION
A QUARTERLY BULLETIN

Vol. IV, No. 2. — April 1952

EDITORIAL:

THIS issue of the *Bulletin* is entirely devoted to health education, which is a continuing concern of those working in the field of fundamental education. The material has been prepared and gathered by the World Health Organization. Opinions expressed are, however, those of the authors.

The establishment of the World Health Organization was first proposed at the United Nations Conference held in San Francisco, in 1945. In July 1946, representatives of sixty-one governments took part in the International Health Conference, held in New York, at which the Constitution of the World Health Organization was drafted and signed. An Interim Commission functioned until 1 September 1948, when the Organization became established as a permanent, inter-governmental institution, with central offices at the Palais des Nations, Geneva. Today, the Organization has a total membership of seventy-eight countries and one associate member country.

One of the most important of several far-reaching concepts formulated by the founders of the World Health Organization is the definition of 'health' as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'.[1] With this concept, interpreted in its widest possible social sense, as the main objective, it is not surprising to find that the scope of the Organization's concern and responsibility exceeds that of any previous international health movement. Within the budgetary and technical resources available, the Organization seeks to assist countries to strengthen and extend their own health services. The assistance is given in response to requests received from governmental health authorities and takes many forms: assistance to educational programmes for training doctors, nurses, public health workers of all types, and other technical health personnel; assistance in further development of programmes of public health administration, environmental sanitation, prevention and control of communicable diseases, e.g. malaria, tuberculosis, venereal diseases, cholera, etc.; health care of mothers and children, nutrition, nursing and midwifery services; health education of the public; laboratory services, co-ordination of research, epidemiological services, publication of technical studies, and other services.

The work of the Organization is carried on through three principal organs: (1) the World Health Assembly, at whose annual sessions delegates from member countries throughout the world determine the broad policies,

1. World Health Organization. *Constitution.* New York, July 1946.

programme and budget of the Organization; (2) the Executive Board, which gives effect to the decisions made by the World Health Assembly; and (3) the Secretariat, of which Dr. Brock Chisholm is the Director-General.

The Secretariat of the World Health Organization is made up of technical personnel, specialized in various aspects of medicine and public health, and of administrative staff, appointed from countries throughout the world. In keeping with the policy of decentralization, as provided for in the Constitution, six regional offices have been established: (1) the South-East Asia office at New Delhi; (2) Western Pacific at Manila; (3) Eastern Mediterranean at Alexandria; (4) the Pan American Sanitary Bureau at Washington, D.C., which also serves as the WHO Regional Office for the Americas; (5) Africa at Brazzaville; and (6) Europe at Geneva.

A. Helen Martikainen

TWO EXPERIMENTS IN BRAZIL

HORTENSIA DE HOLLANDA; MANOEL JOSÉ FERREIRA, M.D.
AND HOWARD W. LUNDY, Dr. P.H.

THIS is a summary of two educational experiments initiated by the Serviço Especial de Saúde Pública[1] in the state of Minas Geraes, Brazil.

Minas Geraes (General Mines) is the second most populous state in Brazil, with approximately 8,000,000 people living in an area more than three times the size of the U.S.A.'s six New England states. As the name implies, the region possesses unlimited mineral resources and the state will undoubtedly play an important part in Brazil's future.

THE HEALTH COURSE

This project had a double purpose: to provide an intensive refresher course in modern teaching methods and in subject matter for the health teachers of the official normal schools of the state and, at the same time, to revise the health curriculum in those normal schools. The Secretary of Education agreed to postpone the teaching of health during the first semester and to call all the health teachers to the capital to attend the course. Satisfactory completion of the work could be used by the teachers as partial justification for future salary increments.

The central theme was co-operation between home, school and health department; the project was regarded as a demonstration which other states would be encouraged to follow. The professional staff of the Health Education Division of SESP served as a team in planning, organizing and directing the course. The faculty was chosen from the State Health Department, the State Department of Education, and the city of Belo Horizonte, in which the course was given.

The financing of the course was also co-operative in nature, with SESP paying the faculty, granting scholarships to students and providing a full-time co-ordinator as well as consultants. The educational system of the State furnished classrooms, travel funds for the students, mimeographing service and consultant personnel. The State Health Department provided classrooms, a headquarters room for the faculty and most of the faculty members.

Description of the Course

The course was started at the beginning of the 1950 school year in March and ran through July, thus utilizing the four months of the first semester plus the one month of vacation. After discovering the needs of the students through a pre-test and individual discussion as well as by a review of the health problems of the state, the following subjects were scheduled, with the largest blocs of time allocated to the more important subjects: biology, statistics, nutrition, maternal hygiene, infant hygiene, school health (including services, environment and instruction), first aid, bacteriology, parasitology, epidemi-

1. The Serviço Especial de Saúde Pública (SESP) is a co-operative public health programme, created and maintained by the joint action of the Government of Brazil through the Ministry of Education and Health and the Government of the United States of America through the Institute of Inter-American Affairs.

ology, communicable disease control, sanitation, public health administration, public health education and mental hygiene.

Both theory and practice in methods of teaching were included, as well as what to teach. The course included lectures, demonstrations, laboratory practice, field trips, seminars, committee work and individual projects. An introduction to the concept of group dynamics was likewise provided. The motto for the course was 'Remember the Child', and a recreation committee was not the least important factor in helping to make the project a success.

Twenty-four specialist teachers of health from both official and private normal schools completed the course, some of whom had been teaching for ten years. Of this number, fifteen were approved as having passed. During the last two weeks of the project, eighteen directors of normal schools and six local health officers joined the group to receive an intensive summary of the material presented, to consider administrative aspects of the school-community health programme and to approve the revised health curriculum of the normal schools. It is interesting to note that, although they lived in the same town, some of the directors and health officers met for the first time during these two weeks.

Revision of the Health Curriculum

The health curriculum is standardized in the official normal schools of Minas Geraes, and the Secretary of Education agreed that our revised programme

Practical field work in a one-room rural school.

should form the basis for the new curriculum. Early in the project, therefore, two committees were established, one to revise the health course taught during the second year of the normal school and the other to revise the health course of the third year.

In addition, two more committees were formed to work out plans for reaching rural teachers, since in Minas Geraes only 6 or 7 per cent of them are normal school graduates. One of the committees prepared a plan whereby the professors of hygiene would visit selected rural schools in the vicinity of their normal schools to carry on in-service health training. The other group prepared a curriculum for a one-month intensive health course which the health specialists would give for rural teachers during vacation. This vacation course has already been given in several other states in Brazil since the group in Minas Geraes originated it.

The students selected from the four committees the one they would like to work on. Each group had the consultation of experts throughout the course. This democratic approach of having the specialists who are actually doing the teaching make the revisions in the curriculum was one of the strong points of the project. During the final two weeks the directors of the schools and the health officers went over the proposed plans. After suggesting certain changes, they gave the revised programme their unanimous endorsement. The advantages of this collaboration are obvious.

Related Outcomes

Before the project had proceeded very far, it became obvious that there were numerous problems on which decisions were needed from both the State Department of Health and the State Department of Education. This led to a Joint Committee consisting of representatives from each department and from the normal schools. The group held monthly meetings for the duration of the course to consider all aspects of the school-community health programme. It also formed the nucleus of an expanded Joint Committee which will be described in the second part of this paper. This was the first such group to function in Brazil.

Because of the many facets of the health programme the need for co-ordinating personnel became obvious. The directors and the health officers approved a plan for the health specialists to serve as local co-ordinators between the schools, the health departments and the normal schools. This co-ordinator would also act as chairman or secretary of a local joint committee. Thus the basic elements for community co-operation in health have been established.

The meeting of the directors marked the first time that they had ever been called together. Several times during the two weeks they held conferences to discuss general problems of administration. This led to the formation of an association of directors which plans to meet once or twice each year. This was a rather unexpected but nevertheless important outcome.

THE NUCLEAR PROJECT

The Serviço Especial de Saúde Pública has also initiated in the state of Minas Geraes an entirely new co-operative programme in agriculture, education, health and transportation. This demonstration started in April of 1951 in the county of Governador Valadares and is of three years duration.

The objectives of this project are to demonstrate:

1. An economically feasible formula and a practical mechanism whereby

official agencies on the federal, state and local level may work together effectively in the utilization of public funds to improve both human and economic resources in a specified rural area.
2. The importance of a co-operative and co-ordinated approach in agriculture, education, health and transportation.
3. The value and methods of securing community participation or 'helping the people to help themselves'.
4. The combination of a community centre with a 'nuclear' system for providing services in a rural area.

Administration

In addition to the SESP, the following groups are participating in the work: the national Department of Education, the Rural Credit and Assistance Association, the four State Departments of Agriculture, Education, Health and Transportation, and the county government. To administer the project, there is a Joint Committee consisting of the directors of each organization and an Executive Committee made up of one professional staff member from each group. With a few additions, this Executive Committee is composed of the members of the Joint Committee of the health course, who are accustomed to working together for a common purpose. The chairmanship of this committee rotates every month; during his period of office each chairman is responsible for visiting the local project to give consultation and supervision. At the regular monthly meetings of the Executive Committee in the State capital he makes a report on his visit and discusses the progress and problems of the project, while the Joint Committee meets three or four times a year to hear reports from the Executive Committee and to take any action needed.

Each organization contributes to the project in two ways: first, funds, personnel or materials for its own particular field, and secondly, by a small amount of money towards the general funds which are used for items common to all services. The SESP serves as financial agent for the project, making necessary purchases and rendering an official accounting at the end of the year.

The Local Project

The project will require three years to demonstrate how government services may be efficiently rendered to an entire rural county. The work was started in that part of the county known as Chonin, but during the second year another district will be added. In the third year a third district will complete the plan. The administrative and supervisory personnel will cover the whole county, leaving auxiliary staff in each of the rural areas.

In each district the staff of the project will have its office in a 'community centre building'. This will also contain space for demonstration classes and other group meetings. Several strategically located sub-centres will also be established at farms in the surrounding area. The staff will visit these sub-centres on a regular schedule, which will be known to all of the residents in that area. There will thus be created a 'nuclear' system for rural services.

One of the basic principles of the project will be to secure as much participation of the people as possible in improving their own welfare. To assist in accomplishing this, a non-political community council will be formed in each district, which will act in an advisory capacity to the project and assist it in every way.

At present the local full-time staff of the project consists of a co-ordinator

who is a general educator and is responsible for supervision of the project, three elementary school teachers, one agronomist, one home economist and one sanitarian. In addition, a doctor and a nurse from the SESP's health centre in the county seat come to Chonin one day and two days a week respectively. This service will be increased as new territory is added. A social anthropologist, with the help of two graduate students, is also making a study of the cultural patterns of the area to aid in planning the project.

While each staff member is responsible to his own organization for the technical aspects of his work, he is likewise under the supervision of the co-ordinator in order to integrate the various services into a unified project. In this way each agency is supplementing the work of the other groups and strives towards reaching the overall objectives of the plan.

While some direct services are performed, such as medical care and the granting of supervised agricultural loans, the project is regarded primarily as an educational one. It is for this reason that the co-ordinator is a general educator. Vacation courses for all the rural teachers in the county have been given, and adult education classes were started before the end of 1951.

It is recognized by all members of the staff that one of the biggest tasks is health education. Farmers cannot produce crops and children cannot attend school if they are sick; everyone is interested in reducing the illness that is all too prevalent in the region. It is hoped that the services of a full-time local health educator will be available to the project soon, but meanwhile each staff member carries on health education in accordance with an overall plan agreed upon at the weekly staff conferences.

In improving the human and economic resources of an area it is natural that, at the beginning, some aspects are more important than others. One of the advantages of this co-ordinated approach is that all forces can be mobilized at the same time to solve the problems with the highest priorities. When the privy programme was recognized as being urgent, the doctor and nurse emphasized its importance to each clinic patient; the sanitarian showed movies in the public square; the local padre spoke strongly in favour of the work during mass; the agronomist and home economist stressed it in their contacts, and the school did its share. Thus a concentrated effort was put forth that would be difficult to achieve if each agency worked separately.

Although at the time of writing the project will only have been in operation nine months, several important results are already apparent. First, a method has been demonstrated whereby federal, state and local government services can effectively co-operate through the technique of a joint committee to administer a specific project. Second, it is clear that the work of all agencies is more effective when they are participating in a co-ordinated endeavour than when they are operating separately. Third, there is the new hope that the project has already raised in the hearts of the people of the district. They now see a possibility of altering certain economic and health conditions which have kept them enslaved to a marginal level of existence. Although it is too early to be sure, it appears that the community centre approach combined with a 'nuclear' system may be an effective way to bring governmental services to a rural area. Finally, and perhaps most important of all, the people themselves have shown a definite interest in the planning and execution of projects which will benefit both the individual and the community.

A TOTAL HEALTH EDUCATION PROGRAMME FOR THE PHILIPPINES: A NECESSITY AND A POSSIBILITY

TEODORA V. TIGLAO

ABOUT 90 per cent of the population of the Philippine Islands live in rural areas. In the development of public health programmes, however, there appears to have been a tendency to lay the greater emphasis on urban health work. Attempts have been made to reach the rural areas, but somehow the machinery has not been very satisfactory, whether because of the lack of co-ordination among the different health agencies, of inadequately trained personnel, or of funds.

In an effort to remedy this situation, certain public health authorities prepared a plan which later materialized into the Rural Health Demonstration and Training Centre. Its objectives were:

1. To serve as a regional field station for public health workers, physicians, nurses, sanitarians, midwives, etc. in the application of preventive medicine and public health to the needs of the communities.
2. To serve as a means of determining and demonstrating practical and efficient measures for controlling public health problems.
3. To serve as a demonstration centre for carrying out the various functions of a modern public health service with full utilization of community resources within the means available.

This programme met with the approval of the Unicef[1] representatives in the islands. With WHO lending technical assistance, Unicef furnishing the equipment, and the Government of the Republic of the Philippines paying the salaries of the personnel, this programme started to operate 1 February 1950 under the name, Rural Health Demonstration and Training Centre, Philippine WHO/Unicef-Assisted Programme.

A 140 square kilometre area of Quezon City with an estimated population of 35,000 was chosen for the demonstration area. It may seem paradoxical to have chosen an area in a city. It should be noted, however, that Quezon City was created by a special act of Congress prior to World War II in an effort to relieve the congestion in Manila. This city was an almost non-populated part of Rizal province which up to the present has remained mostly agricultural. At the inception of the programme there were four health centres in the area. It was decided that the Rural Health Demonstration and Training Centre would work through these health centres as part and parcel of the Quezon City Health Department. The Demonstration Programme would merely equip the health centres and supplement the City Health Department's activities.

For statistical purposes and in order to distribute the health services more evenly, it was decided to divide the area into five health districts. This paper will be confined to two of these districts, as they have been completely surveyed, and can be considered the most typically rural part of the demonstration area. The health needs and problems found there may well reflect the problems and needs of the rest of the rural areas in the Philippines.

These two health districts have a population of 14,000, widely dispersed over an area of sixty-two square kilometres. Except for three provincial roads which are badly in need of repair, the different parts of the districts are acces-

1. Unicef: United Nations International Children's Emergency Fund.

sible only by dirt roads and footpaths that wind through vast areas of rice fields. Modern facilities are totally wanting. There is no electricity, no municipal water system, no modern means of sewage disposal, no telephone and no hospital. There are two central elementary schools, with one-room school annexes in the remoter parts. Even the schools have no water facilities of any kind; some do not even have pit privies. Either because of the inaccessibility of the schools for other parts of the districts, or the parents' poverty, or because children would rather work as farm hands, 47 per cent of the children of school age do not attend school. Very few children are able to go to high school as there is no public high school in the locality. Of the family heads 37.2 per cent are farmers and livestock owners, 24.2 per cent are irregular earners or unemployed, 17 per cent are labourers, 16 per cent are employees and only 1.6 per cent are professionals. Ninety-eight per cent of the population are permanent residents who own their homes, however small these may be.

The house-to-house survey conducted by the Rural Health Demonstration and Training Centre brought to light many unfavourable health conditions. Paramount among these are poor sanitation and malnutrition. Of the total number of houses 57.6 per cent have no form of toilet whatsoever; 33.5 per cent use open pit toilets. The dangers of this insanitary means of waste disposal are further aggravated by the presence of many stray animals and the unhygienic maintenance of food establishments. Further, there is no municipal water system, so that 34.5 per cent of the people still depend on surface wells and on open springs for their drinking water. The incidence of intestinal parasitism and gastro-intestinal diseases is therefore high. Added to these is the malaria control problem, the two districts being in a malarious region.

There are, of course, existing sanitary ordinances and regulations designed to control these conditions, but legislation has preceded health education and the people have not realized the need for these sanitary measures. Why should they when their fathers—and great-grandfathers—lived under the same circumstances, maybe, and did they not live to be centenarians.

Then there is the problem of malnutrition. A study of the survey data reveals that infantile beriberi and congenital debility claim the lives of very many infants. For the period of 1946-1949 the neonatal death rate was 131.1 per 1,000 and the infant death rate 266.5. It is evident that nearly half the infant deaths occur before one month of age. This high infant mortality may be attributed to the poor diets of expectant mothers and to the lack of adequate care given to infants. Among babies, pre-school children and school children, underweight, underdevelopment, anaemia, skin diseases, multiple dental caries and other infections, which occur as a part of the vicious circle in cases of malnutrition, are prevalent. The high incidence of tuberculosis, a disease in which nutrition plays an important role, is also another health problem.

The paradoxical thing is that these conditions of malnutrition exist despite an abundant food supply. Various kinds of vegetables and fruits are grown in the area, and there is a great deal of poultry and hog raising; buyers from a neighbouring city come to purchase fruits, vegetables, eggs, pigs and carabao milk. The trouble is that the people prefer the monetary returns of their products rather than their nutritive value. They are content to subsist on a monotonous diet of rice and fish. Why? They have very little information, if any, and people eat without any considerations of food value. Ignorant of the importance of a correct choice of food, they still cling to old food practices and superstitions, so much so that nutritious foods are often tabooed from the expectant mothers' and infants' diet. Eggs, for example, should not be fed to babies as they cause feeble-mindedness. Supplementary feeding is withheld as long as mothers have breast milk. Artificial feeding, when given, is prepared without

due consideration for the right proportion of ingredients or hygienic preparation. Add to this ignorance the low socio-economic status of the people and the problem becomes enormous.

Lack of adequate medical care presents another health problem. Only 9 per cent of the infants at the time of the survey were receiving medical care; only 4 per cent of the expectant mothers had pre-natal care; 54 per cent of the medical cases encountered did not have any medical attendance and 71.7 per cent of the families needed dental care. Again, owing to the lack of health education, 'quacks' are still patronized, and unlicensed midwives handle the majority of the deliveries. Mothers do not see the necessity of seeking pre-natal care and medical guidance for the care of their babies. Physicians are consulted only in cases of extreme urgency and, should the patient die, the physician is to blame. The hospital is a 'place to die' and it takes a great deal of coaxing and persuading to get a patient into one.

Emotional bias and prejudices have also barred people from seeking medical care. The inconvenience of walking across miles of rice paddies to reach the health centre only to be made to wait in the clinic or to be met with the unsympathetic attitude of some of the health workers has resulted in indifference towards health services. Because the people have not learned to seek advice except when ill, the doctor, the nurse, the dentist, the sanitarians have always been associated with pain. Children shake with fear at the sight of a health worker because ignorant mothers have used them as a threat to make their children behave. On the other hand, the public health workers, maybe through no fault of their own, have not striven hard enough to promote good public relations simply because they do not know how and why. They have not had any public health training.

The schools, which could have served as a very good channel for inculcating and disseminating correct health behaviour, have not acquitted themselves of this responsibility. A hygienic environment has not been provided. At the time of the survey the two central elementary schools had no source of water supply. Mid-morning lunches were entrusted to outside vendors whose only interest was profit. The health services were neglected. There was no school physician, no dentist, and the school nurse seldom came round to these schools. Because the teachers are not adequately prepared, health instruction has not been functional and many health education opportunities have been missed.

These, then, were the health problems which the Rural Health Demonstration and Training Centre was faced with when it started to operate. Conscious of the hurdle it must go over, the initial step it took was to gain support for its programme. The *barrio* lieutenants (men appointed by the mayor to take charge of neighbourhoods on a voluntary basis) and other potential leaders spotted during the survey were approached. The aims of the centre and of the health department were explained to them. At the same time they were sounded out on what they felt were their health problems and needs. Community meetings were held, to which top ranking government officials were invited: the Mayor, the City Health Officer, the Councillors, the Superintendent of Schools, and the Social Welfare Administrator. These meetings gave the city officials opportunities to interpret the government's programme; they also gave the people a chance to voice their sentiments, their problems, and their needs. The people have been awakened to their needs and shown how anxious they really are to do something about their problems when given a chance. As the people's interest in the programme grew, Citizens Health and Welfare Committees, composed of key people in the community, were organized in each health district. These committees invited community-wide participation and have been instrumental in bringing about improvements. They have been

able to bring to the attention of officials concerned the necessity of constructing and repairing drilled wells which heretofore have been neglected. All the schools in the area are now provided with one, and others have been constructed at strategic places in the community. To date, fifteen new public drilled wells have been constructed, aside from privately owned ones. Street signs have been put up for the convenience of the public health workers. Provincial roads have been slowly repaired.

The Citizens' Health and Welfare Committees have also informed the people about the health services being offered at the health centres. As a result, more mothers now come to the pre-natal clinics, babies are brought to the 'healthy baby' clinics (healthy babies were never brought to clinics before) and more and more mothers now ask to be delivered by nurses, by licensed midwives, or by doctors. And some even go to hospitals when advised.

One of the committees has distinguished itself by putting up a health centre. As a result of the survey and of working with the people in the community, the people have realized the need for health services. They started to organize themselves. In one community meeting, they invited the top ranking city officials and some representives from the State University (this area is on the periphery of the university site). At this meeting the dire need of the area for health services was voiced and as a challenge to the city officials, the chairman offered the use of a site, and a shed that could temporarily be used as a health centre. He also offered to donate building materials in the form of adobe stones, sand and gravel, should the city administrators decide to extend health services to them. A representative from the university volunteered to ask donations from the university in the form of second-hand building materials. Aroused by the people's enthusiasm, the Mayor counter-offered to appropriate 1,000 pesos ($500) for the construction of a building. Through negotiations with another government agency the lease of the land where the building was to stand was obtained. After a few months, the plans materialized and today a 4,000 pesos building stands, a symbol of what people can do if they decide to help themselves. The building was completed through donations not only of building materials but also of labour from the community. Now the garden is being planted and potted flowers and ferns decorate the porch. The people are very proud of their centre and are making good use of its services.

Another community is soon going to follow suit. In a like manner, negotiations are underway to construct another building which will serve as a sub-health centre to the newly constructed one.

As the Rural Health Demonstration and Training Centre was trying to establish good public relations and gaining the support of the public, it was also trying to influence the public health workers in the local health department. To promote better teamwork among the different members of the staff of the Rural Health Demonstration and Training Centre and of the Quezon City Health Department and to keep them abreast of recent trends in public health, a series of conferences and in-service training meetings have been and are being conducted for physicians, nurses, midwives, and sanitarians. The importance of good public relations, and the various opportunities which the different staff members have for health education of the public, are always stressed in these courses.

To improve the existing school health programme, conferences have been held to which the top level officials of the school, the local health department, and other agencies concerned have been invited.

After these conferences, in-service training for teachers was undertaken. Health materials in the form of pamphlets, films, posters, etc. have been given out or loaned and the teachers have been introduced to the various resources

that can be utilized to make health teaching more meaningful. To bridge the gap between the school and the home, a number of Parent-Teacher Association study groups have been organized. These PTA groups have helped to bring about some favourable changes. The supervision of the mid-morning lunch programme has now been taken over by the school. The parents have also responded very well to requests to be present during the medical examinations. It should be mentioned in passing that a school health physician and a school dentist have been assigned to the area by the Rural Health Demonstration and Training Centre. Together with the school nurse, they have introduced the preventive and educational aspects of the school health services. Children have now been educated to regard the physicians, dentists, and nurses as friends instead of some dreadful spectre from whom they used to hide, or only submit to with fear. Various other study groups have been formed, and civic organizations have been created. Under the sponsorship of either the PTA, the Ladies Association, or the Citizens' Health and Welfare Committee, community meetings have been held where, in addition to health topics, such topics as soil conservation, poultry and hog raising, food preservation, and the like are discussed. A speakers' bureau has been formed which draws on people from various agencies; films, leaflets, pamphlets, posters, bulletins and charts have been tested and used. Much of the printed matter has been prepared and distributed by the Rural Health Demonstration and Training Centre.

These, then, are the first results of the health education programme of the Rural Health Demonstration and Training Centre in its less than two years of operation: better public relations; more understanding of the health services and therefore more public support; co-ordination of the activities of related agencies; better utilization of resources; making people conscious of their needs and helping them to meet these needs; a notable change in the health attitude and behaviour of the people and the integration of health education into the various phases of the total public health programme, through better trained personnel who have been imbued with the health education aspects of their respective jobs. The programme is yet too young to be appraised, but comments received from local and foreign quarters have all been encouraging.

Now, if the problems met in this pilot area reflect the general health problems in the greater part of the Philippines, then without doubt health education is a necessity for the whole country. If the foregoing results have been realized under the existing conditions, then health education is a possibility. What is now needed is for leading health officials, with other officials in the government and in voluntary agencies, to put their heads together and, through co-operative planning, to work out a total health education programme that can take care of the rest of the 90 per cent of the rural population.

WHO PROGRAMME IN HEALTH EDUCATION OF THE PUBLIC

A. Helen Martikainen

Recognition of the essential need for the health education of the public is reflected in two statements of principle in the Preamble to the Constitution of the World Health Organization, namely that 'the extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health' and further that 'informed opinion and active co-operation on the part of the public are of the utmost importance in the improvement of the health of the people'.[1]

In accordance with a recommendation made by the World Health Assembly at its first annual session held at Geneva in 1948, steps were taken the following year to initiate a programme of 'health education of the public' as an integral part of the Organization's effort. Technical responsibility for this programme has been entrusted to the Health Education of the Public Section, set up in 1949, whose major functions are:

1. To co-operate with governments, upon request, to assist them in strengthening and extending their own health education services to individuals, community groups and organizations.
2. To co-operate with the United Nations, specialized agencies, and international non-governmental organizations in joint planning and development of the health education aspects of projects in which the World Health Organization collaborates.

GENERAL CONSIDERATIONS

Health education of the public can be defined in a variety of ways and has been said to mean different things to different people. For the individual person and family group, health education includes *all experiences* which favourably influence habits, attitudes, knowledge, and practices, making it possible for people to live harmoniously and more effectively in a changing total environment. In village or community terms, health education can mean creating opportunities for the people to participate in and assume responsibility for the solution of their own problems, in partnership with health specialists, educators and others. Health education is a proper part of any school or fundamental education programme seeking to assist children and adults to gain an understanding of the health problems in their own immediate environment and of their role and responsibilities in attaining higher standards of healthful living.

Health education is essentially a 'teamwork' endeavour which for most effective results requires co-operative planning and the participation not only of professional and auxiliary workers in health, education, agriculture, and other fields but also the people themselves. Health education thus seeks in its widest sense to encourage people of all ages to want to do things for themselves. As was stressed by the Organization's Expert Committee on Mental Health at its second session in April 1951—'Education has its best chance of success if individuals and groups are stimulated to take an active part in studying and

1. World Health Organization. *Constitution.* New York, July 1946.

solving their own problems. People are much more likely to change their behaviour when they have a part in planning the change.'[1]

PROGRAMME ILLUSTRATIONS

Fellowship Assistance

One of the chief drawbacks in health education programme development in a great many countries is the serious lack or complete absence of health personnel trained and experienced in both public health and health education. This lack of full-time leadership is coupled with a great need for all types of medical, nursing, sanitation and other health personnel. All these health workers, as an essential part of their public health and medical service, have a recognized responsibility in health education development. The full-time professional health education worker, known in some countries as the 'health educator', is of comparatively recent origin. Bearing in mind the training requirements for all types of health personnel, and within its budgetary limitations, the Organization provides fellowships to enable men and women of promise to become leaders in the health education of the public in their own countries.

Assistance to Educational Institutions

Another important problem is that of enabling countries and regions to develop and strengthen educational programmes for preparing all types of health personnel. Coupled with this extension of education programmes in public health is the need to incorporate both theoretical and practical preparation in individual, group and community health education, methods and practices for all prospective health workers.

During the past few months, steps have been taken by WHO to meet two requests of this character. It is proposed that starting in 1952, the Government of India, in co-operation with WHO and Unicef (the United Nations International Children's Emergency Fund) shall collaborate with the All-India Institute of Hygiene and Public Health at Calcutta, in a plan providing for the assignment by the Organization of a trained public health educator to serve on the faculty of this public health institution. The main objective will be to establish a health education curriculum, particularly in relatior to maternal and child health problems and the field training centres associated with this Institute.

The second request for a WHO public health educator has been made by the Institute of Public Health, University of Malaya, in Singapore.

Similar interest in developing curricula and short courses in health education of the public has been voiced by public health leaders from countries in Europe and in the Eastern Mediterranean region.

In some countries, both health and education authorities have recognized that a problem of equal importance is that of preparing teachers and school administrators for their role in school and community health programmes. This is being done through courses of instruction, and experience in school health and health education offered in teacher training institutions. One illustration of this co-operative effort is described in an article included in this

1. *Expert Committee on Mental Health. Report on Second Session.* Technical Report Series No. 31, World Health Organization, Geneva, April 1951.

issue entitled 'Two Experiments in Brazil'. Further examples of this nature are cited in the other articles also.

Particular recognition of the important teamwork role of teachers and school administrators in the promotion of health among school-age children and the community was given by an Expert Committee on School Health Services at its first session held in Geneva during April 1951. The committee noted that 'if teachers are expected to develop in children the health practices and sound informational background conducive to healthful living, then they themselves must have the opportunity to learn what to teach about health. The best means of accomplishing this, obviously, is to introduce health instruction as part of the course of study in the teacher training institutions. In such preparatory courses the prospective teacher will learn not only the fundamental facts concerning the functioning of the human body and preventive health measures but will also have experience in learning to observe children from a health and developmental point of view'.[1] It was noted further that 'many teachers are now at work who have had opportunities for such preparation for teaching health. For them, instruction must be specially planned through vacation courses, conferences, institutes and seminars, in close co-operation with public health agencies, unofficial health groups, medical and nursing resources, and other pertinent groups'.[1]

In view of the above, the World Health Organization, with Unesco, seeks to co-operate with interested countries in their own efforts to improve health teaching and services in schools and provide health education for school teachers and health workers.

Assistance of Short-term Consultants

At the request of countries, the Organization endeavours to provide the services of highly qualified and experienced health education consultants. These services usually embrace consideration of the existing problems and programmes in the country concerned and propose next steps most suitable for strengthening health education services among the villages, schools and other community groups.

During the past two years, WHO has been able to meet requests of this kind received from three countries in Europe, two in the Eastern Mediterranean region and from countries in Latin America.

Assignment of Personnel on Long-term Basis to Country Programmes and Demonstrations

Another type of service which the World Health Organization is being asked to provide whenever possible, is the assignment, for longer periods, of experienced personnel in health education of the public as staff members of national ministries of health, or of local area health demonstration projects, or of Government/Unesco fundamental education programmes in various countries.

Three national ministries of health in Latin America have requested the assignment of WHO health educators to their countries to assist in the development of plans and programmes adapted to the problems, interests and resources of the various communities of the countries concerned.

Two WHO health educators are at present working on Government/WHO health demonstration projects in two regions and three additional projects are proposed. In each instance the Government appoints health educators

1. *Expert Committee on School Health Services. Report on First Session.* Technical Report Series No. 30, World Health Organization, Geneva, April 1951.

of its own, who work with the WHO representatives to ensure continuation of the health education programme started in the villages and communities. In these experiments minimum supplies and equipment are provided, as far as possible.

Joint Co-operation with other Specialized Agencies of the United Nations and Non-Governmental Organizations

Particular mention should be made of the steps being taken toward co-ordination of effort in programme development with the United Nations and other specialized agencies. Especially noteworthy is the close co-operation with Unesco. Joint preparation of this issue of the *Fundamental Education Quarterly Bulletin* is one illustration.

The Government/Unesco experiments which have some reference to health services, including health education of the public, are recognized by the World Health Organization as being of fundamental importance in helping to create people's understanding of and participation in disease prevention and health promotion. The Organization has assigned a WHO health educator to what is generally considered the most important experiment in fundamental education launched by Unesco—the Regional Training and Production Centre for Latin America, at Patzcuaro, Mexico, evolved by Unesco jointly with the Organization of American States, the Government of Mexico, the Food and Agricultural Organization, the International Labour Organization and the World Health Organization. Similar collaboration with Unesco and the other Specialized Agencies is envisaged when additional regional production and training centres of this nature are established in other parts of the world.

It has become more and more apparent to the Organization that one of the very important problems to be met in many countries is that of enabling local and national authorities to develop their own technical and training resources, so as to produce economically various types of audio-visual aids related to local health problems and resources.

During the past year, Unesco has assisted in a Government/WHO health demonstration project by assigning a visual aids expert to assist in local production of visual material required for health education work with the village health committees, schools, health clinics, and for family health instruction in homes. Further, at the invitation of Unesco, the Organization prepared an annotated bibliography of health education references and articles, published in the series, 'Occasional Papers in Education'.[1]

The World Health Organization is at present co-operating with Unesco in the preparation of a health education handbook for teachers, to be published by the Oxford University Press in its series of handbooks on science teaching.

Exchange of Information

Assistance in exchange of information between countries on various aspects of health education is another type of service provided by WHO. Requests received are most often for information on sources and examples of health education programmes for parents, community groups, and school health programmes; on opportunities for study in health education of the public; and on available health education references and sources for health education equipment, literature and related materials.

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1. Unesco. *Health Education: Selected Bibliography* (Occasional Papers in Education, No. 11), Paris, 1951. 56 pp. Free. Published also in French and Spanish.

Professional Assistance

The opportunity for WHO to play a wider role in helping countries to implement the policy of health education as an integral aspect of national programmes will be made possible through the assignment of three full-time regional advisers in health education of the public. They are to serve with the WHO Regional Offices for the West Pacific, Europe and the Americas respectively.

An Expert Advisory Panel on Health Education of the Public, composed of outstanding leaders in this field throughout the world, has been established by the Organization. Through contact and correspondence with them, valuable assistance is secured in evolving further methods for international teamwork in health education of the public. In addition, the central office of WHO in Geneva and the respective WHO Regional Offices are endeavouring to foster two-way exchange of information and experiences relating to health education development in various countries. The Organization invites all those concerned with and engaged in education of people in health matters to make their experiences known, through their local and national health authorities, to WHO. This information is of interest and value to workers in other countries who are engaged in the development of national programmes of health education.

THE HEALTH EDUCATION PROGRAMME OF PUERTO RICO

MARIA ZALDUONDU

INTRODUCTION

In 1944 the Island Health Department, with the help of a Health Educator Consultant assigned to the District Office of the United States Public Health Service in San Juan, initiated regional planning for a health education programme for the entire island of Puerto Rico. So that a co-ordinated programme would operate from the beginning, the interest of other agencies was solicited.

The first step was the recruitment and training of health education personnel. A group of eleven Puerto Rican health educators returned to the island in 1945, after a one year post-graduate course in health education at the University of Chapel Hill, North Carolina and Michigan University, to continue the programme initiated by the Health Education Consultant. Two were assigned to the Office of Health Education, under the supervision of the Chief of the Insular Health Department. Eight were assigned to four of the five health districts, four as health educators from the Department of Health and four as field technicians from the Department of Education. This team of workers in each district is developing a health education programme through the health department, the schools and the community. Another of the health educators of this first group joined the staff of the University of Puerto Rico. In September 1946, the original workers were joined by ten more. Thus the programme has continued to expand according to the 'island-wide plan'. At present there are fifty-six health educators working in the island, all of whom have had a year of graduate study and hold a master's degree in public health.

THE OVER-ALL PROGRAMME

At present, six government agencies are participating in the island-wide health education programme of Puerto Rico, with trained health educators in charge of their programmes. These agencies are the Department of Health, the Department of Education, the University of Puerto Rico, the School of Public Health, the Agricultural Extension Service and the Land Authority. The University of Puerto Rico has two health educators who conduct classes in health education for the students in the Department of Education. The health educator in the Division of Public Health of the School of Medicine is in charge of the courses offered to those training in health education and other public health workers who are trained by this institution. The Agricultural Extension Service, through a health specialist, is developing a health education programme at the rural level. The Land Authority has a trained health educator, whose programme is also developed with rural groups.

Apart from the above mentioned official agencies, the Tuberculosis Association is actively participating in developing a health education programme. It has three trained health educators on its staff. Two private universities—the Polytechnic Institute of San Germán and the University of Santa María at

Ponce—have one trained health educator performing similar functions to the two health educators of the University of Puerto Rico.

A co-ordinating committee was formed in 1945, with delegates from each of the agencies (official and non-official) participating in the programmes. This committee meets monthly at the island level. Its main objective is the planning of a joint programme to avoid duplication of efforts. Its serves also as an advisory committee. One of the outstanding accomplishments performed by the committee has been the preparation of the programme for training health educators in the island. Through the efforts of the co-ordinating committee, the plans were approved and since 1947 all our health educators are trained at the School of Public Health of the University of Puerto Rico.

THE SCHOOL HEALTH PROGRAMME

The main objective of the school health programme is to maintain, improve and protect the health of the school child and that of the community in which he lives.

The Department of Education has planned the school health programme as an important part of the total health education programme for the island. An inter-department committee composed of three representatives of the Department of Education, four of the Department of Health, and one from the Department of the Interior, serves as a co-ordinating and policy making body for the school health programme. The objectives of this committees are:

1. To discuss matters pertaining to the school health programme and the best methods of co-ordinating the work to be done in the field.
2. To appoint sub-committees to study and make recommendations related to specific health problems.
3. To invite consultants in the different fields of public health to guide the committee in matters relating to the objectives, policies and procedures of a general health programme.
4. To hold regular meetings, to consider reports, evaluate programmes and procedures and make recommendations related to the committee's findings.

To carry out its programme the Department of Education has, at the present time, twenty-four field technicians in health education assigned to school districts in the island and a supervisor at the central office.

The health supervisor is in charge of the direction and supervision of the whole school health programme. It is her responsibility to co-ordinate the programme with that of the Department of Health and related agencies. She conducts periodical group meetings and gives individual help to the field technicians regarding the proper development of the programme, helps in the preparation, revision, selection and distribution of health education material, co-operates with the school of medicine in the pre-service training of health educators, and gives consultation and guidance to superintendents of schools, principals and teachers in problems related to health.

The major responsibility of the field technicians is to organize and develop the school health programme of the district to which they are attached.

To attain this objective, in-service training in health is given to all school personnel. This in-service training centres around the following problems: school environment; screening test for eyes, ears, weight and measurements; daily observation of pupils; communicable diseases; mental health; health instruction; nutrition; safety and first aid.

Most of the medical services in Puerto Rico are offered by the Department of Health. These services are somewhat limited because of the lack of trained

Short courses are given to different groups of the community. This is a group of janitors attached to the health unit and the schools attending a lecture on proper methods of cleaning.

personnel, such as doctors, nurses, etc. For this reason, it is necessary for the teachers to do the screening tests so as to assure that children are really in need of medical attention. The children are then sent to the nurse who re-checks them and refers those in need of medical care to the doctor.

The health technicians serve as consultants for all school personnel. They work with teachers in the preparation of health units, serve as advisors for health councils and other groups which deal with health problems, and recommend policies for the improvement of healthful school living.

To co-ordinate the health programme and render better service, the health technician utilizes the resources of the community for the improvement of the health of the school children.

THE HEALTH EDUCATION PROGRAMME OF THE DEPARTMENT OF HEALTH

The aims of the health education programme are:

1. To establish and extend effective health education services through recognized official health channels.
2. To assist other divisions of the Island Health Department in planning and putting into action effective educational methods.
3. To assist communities in planning and carrying out programmes which will contribute to the improvement of health throughout the communities.
4. To continue to co-ordinate the activities of the Health Education Bureau with health activities in the Department of Education and other official departments.

The Bureau of Health Education, under the office of the Commissioner of Health, is in charge of the health education programme. It is supposed to serve

the three divisions of the Health Department (Division of Public Welfare, of Hospitals and Public Health) but owing to shortage of staff it is actually working with only two divisions—Public Health and Hospitals.

The Bureau of Health Education plans, organizes and directs the health education programme of the Health Department according to the needs and resources of the island. This bureau acts as consultant to the Public Health Units and other bureaux and divisions of the Health Department in matters relating to health education. Upon request, it also assists non-official agencies and other groups in the organization of health education programmes. It is responsible for the preparation and distribution of health education material in the island and of the film library of the Health Department.

The staff of the Bureau of Health Education includes four health educators, one visual-aid specialist and one illustrator. Two health-educators-at-large have been recently added to the staff, to meet the need for health education services until the number of health educators increases to cover all the public health districts. These health-educators-at-large, upon request from the health officers from those districts which have no health educators on their staff, are re-assigned to local districts for a limited period of time. Their job is mainly to give in-service training on health education to the personnel of the health unit and to stimulate and co-operate in the preparation of a local health education programme.

The Central Office of the Bureau of Health Education is carrying on the in-service training for the health educators in the field, who work with the Health Department. This is done mainly by:

1. Meetings lasting two or three days, held at least four times during the

X-ray TB mobile unit visits a community. This service is preceded by a TB educational campaign.

year. Efforts are made to include in the agenda topics in which the health educators consider they need more training.

2. Monthly district health educators' meetings, mainly educative.
3. Attendance of health educators at meetings, institutes and conferences organized by other agencies such as the Tuberculosis Association, Public Health Association, Cancer Association, etc.
4. Production of the *Bulletin of the Bureau of Health Education*. This publication is distributed among all health educators. Its aim is mostly educational.

Close co-ordination is maintained with other agencies participating in the health education programme and health education activities are planned together as much as possible. All health education material prepared by the bureau is available to other health educators working at other agencies. The trainees taking the course of health education at the School of Public Health and at the University of Puerto Rico all do their field training at local health education centres, under the supervision of the Bureau of Health Education. The staff of the bureau participate in the planning of the courses and are often asked to serve as lecturers both at the School of Public Health and the University of Puerto Rico.

At present there are seventeen health educators working at the local level, assigned to the different public health districts, but there are still twenty-five districts without a health educator. Our aim is to have at least one health educator for each public district. The local health educator works under the administrative direction of the local health officer, but under the technical supervision of the Bureau of Health Education.

The health educators at the local level help to plan and develop the health education programme of the locality where they work. This includes the Public Health Unit and the community. They act as consultants to the personnel of the health unit in all matters pertaining to health education.

Local health educators are in charge of the in-service training of the personnel of the Public Health Units—through short courses, conferences, staff meetings and wise use of the public health unit libraries. Courses are given in teaching techniques and aids, principles of community organization, group dynamics, food handling, human relations, etc. Realizing that staff meetings are one of the best methods of in-service training, health educators stimulate and help to organize them for all the personnel.

The planning of the health education programme is done by the whole staff, and all personnel participate in both the health unit and community activities. Community health education campaigns are also conducted through joint planning and work ; these are sponsored either by the public health unit or by a community group and cover those fields that constitute the chief health problems in the locality. Efforts are made to evaluate the campaigns so as to determine their effectiveness and thus be able to improve future campaigns.

We encourage the people to organize, but do not fix the nature of the organization. Its structure is determined by the people who build it. So we find that in San Juan, the capital of Puerto Rico, a Health Council was organized with representatives of official and non-official agencies and lay leaders interested in health problems. They are aiming at the organization of sub-committees in the various areas, which will have delegates to represent them on the Central Health Council. In contrast to this pattern of organization, Aguadilla, one of the largest towns in the island, has organized committees in different areas, and will elect delegates to a central health council as soon as all committees are established.

The extension of the health education programme to government hospitals in Puerto Rico, is a recent addition to our programme. The Bayamón

This exhibit on sanitation was prepared by the Health Educator and the Sanitary Engineer.

District Hospital, a 300-bed general hospital, was selected as a demonstration centre. A health educator who is also a nurse is in charge of the project. A survey was made of the health education needs and of available resources there and an advisory committee was formed from different members of the personnel who work closely with the health educator in planning and evaluating the educational activities.

The health education programme prepared by this hospital includes: in-service training of personnel, educational activities with callers at the out-patient department, educational activities for inmates and visitors, recreational activities, consultation services, evaluation of the programme.

This programme has been a new experience and has widened our views as to what can be done in health education in a hospital atmosphere. From the experience gained throughout the year, there is one thing of which we are sure: that education can be integrated into the medical services in the hospital with benefit to the patient.

A well-trained public health nurse has been appointed to the programme on a full-time basis. It is expected that under the direct guidance and supervision of the health educator, she can continue the programme. This will make it possible for the health educator to move to a second hospital, in an attempt to organize similar programmes in other government hospitals.

At the same time, and using our local health educators, other activities are being conducted in various hospitals of the island. A plan to improve the sanitary conditions of our government hospitals was prepared jointly by the staff of the Division of Hospitals and the Bureau of Health Education. Courses for food handlers are offered at the different hospitals. Upon request, the Bureau of Health Education supplies printed materials and posters as well as films. The health educators also co-operate with municipal hospitals and private

hospitals in the training of personnel. Co-operation is given to the Bureau of Nursing in the affiliated programme for the schools of nursing in the island, and to the training of student nurses on the equipment and techniques used in health teaching.

The results of health education are often not fully apparent. It is not easy to measure the results. However, the increased demand for health education services and materials shows that the people are becoming more conscious of the need, and are more aware of the fact that health education is a necessity if the health conditions of the island are to be improved. The participation of lay leaders and groups as well as professional groups in community health projects proves this very clearly. Other local and island agencies are increasingly requesting our co-operation in the in-service training of their personnel. We believe that though there is still much to do, our programme is soundly based.

VISUAL AIDS IN A HEALTH EDUCATION PROGRAMME OF A CHRISTIAN MISSION

Rev. Denys J. Saunders

A missionary has no time to concentrate on one job' many people say, but 'unless he does concentrate his efforts are often wasted' writes an official of the British Colonial Office.

It is in the belief that we must concentrate our energies and our materials if we are to do much lasting good that this report is written.

At Medak, Hyderabad State, India, we have three boarding schools—boys, girls and primary co-ed; a total of about 400 children, coming from scores of surrounding villages. Another 200 come from the immediate locality. The Men's Training School has about 130 students, studying to go out into the villages as evangelists and teachers. The hospital, with over 100 beds, draws patients from a very wide area and the church is the spiritual home for thousands of villagers. The total population of the compound during term time is over 1,200. At the end of term hundreds go to their homes in the villages and others go out to start work as evangelists. Medak is thus a wonderful centre for spreading ideas and habits which need to find their way to every corner of Hyderabad. It may be a unique situation, but it is better to report on the work done in these circumstances than to generalize in a vague way. The same aims and principles will probably apply everywhere.

THE AIM OF OUR HEALTH PROGRAMME

1. To improve the general standard of health of all those in Medak compound. (We cannot afford to have epidemics in a community of over 1,200 people.)
2. To encourage an understanding of health matters and to establish good habits in children and students so that their influence and example may bear fruit in the hundreds of villages of the district. (Preventive measures are less costly than curative measures, and much more satisfactory for the individual.)

PRINCIPLES

A Disease a Month

The programme is worked out on a monthly basis and the plan is to cover eight of the main diseases or groups of diseases in the course of each year. Cholera was threatening the district and so the first month was devoted to that disease. Mosquitoes were then found to be causing much trouble, so our attentions were directed to malaria. Dysentery, tuberculosis, smallpox, leprosy, hookworm, etc. are all on on the year's programme.

The monthly programme will be brought to a climax in a 'Healthy Life Week' which it is planned to link with Hospital Sunday. A further climax—and also a revision—will be provided by special efforts at the end of the school year.

Integration

During each month's programme many audio-visual methods are used to get the information over to people, but it is not just a case of piling fact upon fact and method upon method. The course is based on the principle that visual teaching materials can make the learning process far more concrete and memorable, but it is also assumed that the various teaching methods must be tied firmly together if they are to be of ultimate use in the process of learning.

Integration is not just confined to each separate month's programme, but in succeeding months reference back to the previous programme is made and every effort is taken to assure that the previous teaching is not forgotten.

Another aspect of this principle is that we concentrate on linking health teaching with people's personal experience. We are not concerned with teaching the subject as for an examination. Every effort is made to associate the preventive and remedial measures with the day-to-day experience of the people. We are convinced that the teaching must be ultra-practical and that steps should be taken every month to ensure that there is personal application.

In this respect we stress the co-operative nature of the work and make it clear that the people cannot rely on the mission to assume all the responsibility for health and sanitary measures, etc. For example, the regular cleaning of latrines is a community responsibility and all are encouraged to join in the search for mosquito larvae. An effort is made to create a community consciousness along the lines desired, so that everyone talks about the subject, and something in the nature of mass action results.

Before school holidays, special talks are given linking the teaching with village home conditions; when the children return, an enquiry is held to discover what they have been able to do. Students on preaching tours also have great opportunities for health teaching and can spread the information they have gathered during the months of the health programme. In the future, it is hoped to provide something in the way of leaflets or pictures for each child to take home.

Educational Principles

Like good teaching, the campaign must rely on the two-way process. We are not just concerned with putting facts into students as if we were filling jugs with water. We need to raise problems and questions in their minds and help them to answer them. Therefore class preparation, practical application and class revision are all essential in the scheme. We are not concerned with superficial filmshows, but with important teaching which relates to life—and death.

METHODS

First Week. Teachers' Preparation

All principals, teachers and hostel wardens are called together by the hospital superintendent. The aim of this meeting is to put over the medical information and to consider the teaching means and methods for the month. In teaching the medical facts, the subject of the month is summarized under five or six main headings and typed notes are given to each teacher for future reference. It has been found better to use locally produced summaries rather than Government Health Department leaflets—making it easier to select and simplify, and to link main headings with the other teaching materials used during the month.

Sometimes special filmstrips are used for the training of the teachers. The

filmstrip, NCC Northern Film Library FHH 393 'Malaria', gives a very comprehensive picture of the causes, research history and preventive measures. This strip was felt to be far too long for ordinary health campaign work and, even in the teachers' group, about nine or ten frames were omitted at various points; on the other hand, this proved to be an excellent training aid for the leaders. Then the posters, flannelgraph material and filmstrips to be used in the programme are demonstrated and their relation one with the other is made clear.

This training group also considers the subject of village treatments. These remedies are recommended whenever they are found to be based on sound principles, and their weaknesses are exposed when it is found that they are based on superstition and ignorance.

Second Week. Class Work

The aim is to prepare the minds of students by raising problems and questions about the disease concerned, to link with local experience by reminding students of recent epidemics, deaths from cholera, etc., and to prepare the minds of people for what they will see in filmstrips and demonstrations. There is no doubt that people see on the basis of what they have experienced, and it is therefore best to condition them beforehand.

Schools have done their class work in various ways:

1. Sometimes it has been done with the whole school assembled together, but this is not considered the best way because it prevents the more individual and personal contact between teacher and student which is so essential in a subject of this sort. The posters and flannelgraphs, etc. are not designed to be used with groups of more than thirty to forty, so difficulties are experienced in that direction as well.
2. In another school, three of the teachers who have been present at the preparation meeting have given class teaching to the groups they meet in the course of the day's timetable.
3. In other cases, it has been left to the science teacher to deal with the subject as he sees the various classes in the course of the week. In this case, one has used the aids provided, another has been content with dictating notes, another has used the discussion method. Health questions have also found their way into end-of-term examinations.

The posters used in class are linked with the five to six main headings of the typed notes issued by the medical superintendent and they also use key pictures of the filmstrip to be used. The flannelgraph material is published by the Christian Medical Association of India and distributed by the North India Tract and Book Society, 18 Clive Road, Allahabad. Stories about cholera, sore eyes, and malaria are provided with the kit, and other stories can easily be made up with the 139 figures provided. The IVS 'Jet' series flash cards are also used because they help to anticipate some of the filmstrips used. If the children help to work the flannelgraph and copy the posters it all helps to impress the subject-matter on their minds.

Third Week. Films or Filmstrips to Schools

In many cases the film or filmstrip provides the key of the whole programme, but it is not to be regarded as a *tamasha* or entertainment. It is to be looked on as an educational aid and as part of a scheme which helps to provide a background of thought and an outlook of mind. With this in mind we have thought it worth while to give the time for four separate programmes in the schools rather than one mass meeting.

Two main types of filmstrips are being used:

1. The IVS 'Jet men' series which deal with subjects in a very straightforward and simple way. These drawings have sometimes made the school-children laugh a good deal, but we have usually been able to turn this to good account. The commentator has laughed with the children and tried to point out the folly of the people eating fly-blown food or the man being bitten by a mosquito. We have, however, always sought to regain the attention of the audience, and often the seriousness of the jet man's folly is quickly appreciated when pictures of illness and death follow. In fact the emotional response given when laughter is roused may be a great help in getting over the message in the next one or two frames.
2. Walt Disney cartoon series available from the United States Information Service, 3 Queens Road, Bombay 1. These were produced for South American audiences but the background is usually unobtrusive and the majority of audiences immediately accept the pictures as applying to India. These strips are well designed, the visual continuity is good and there are several good key pictures which can be used for summaries and main teaching.

The NCC Northern Film Library HH 104 'Malaria' film was used in one month's campaign and, although it cannot be called a prizewinner, it was found possible to work it in by speaking of 'paludrine' instead of 'quinine', etc.

Demonstration

The demonstration is usually given the day after the film or filmstrip programme; a doctor and the hospital technician visit the schools to show how some of the facts learned in the course can be put into practice in every-day life. The idea of 'expression work' is not new to teachers and it is well known that if you cannot use your knowledge you have not really learned it. This, of course, is particularly important when dealing with matters of life and death.

Latrines are inspected and wells are treated with potassium permanganate when cholera is threatened. Walls of sleeping quarters are sprayed with DDT, mosquito larvae are exhibited in bottles and the search is started in pools, puddles and ditches near the school which may contain similar larvae. Suggestions are then made for the draining of the ditches and the filling in of pools and puddles, and the method of spraying oil is demonstrated.

Revision in Class

The demonstration should provide plenty of material for further discussion in classes and all teachers should recognize the importance of follow-up work. It is more valuable to revise a subject before it is forgotten than to re-learn it all later. The day after the demonstration seems to be psychologically the right time to cement the facts and experiences in the minds of the children and students.

Apart from discussion, quiz tests can be given, essay competitions organized, and exhibitions to tell others of the programme planned and made in the drawing and handicraft classes. Poster competitions are also planned in preparation for the 'Healthy Life Week'.

Filmstrip Revision

With several subjects there are excellent filmstrips which help to revise the material of the month and these can be used right at the end of the month, before going on to the next stage of the programme. It may also be found valuable to use these strips several months later in order to recall the previous work done and to help to keep up the standard of cleanliness, etc.

The Disney strips available from the United States Information Service are particularly good in this respect. 'How Disease Travels' has two excellent sections on fly-borne and water-borne diseases. (The last two sections on tuberculosis and smallpox are not so clear and we have omitted them.) 'Cleanliness and Health' is another strip which is concerned with the correct use of the latrine and it is a great help when considering bowel diseases, hookworms, etc. 'Clean Water' also takes up some of the fundamental points in healthy living. All these cartoon strips are well designed and get their messages over very effectively.

'POST MORTEM'

This may be the wrong term to use for the evaluation process in a health programme, but some sort of meeting of leaders does need to be held every month to consider the successes and failures of the methods employed. What changes in habits have been noticed with the school children? Are they keen to see that no flies land on the food? Are they careful to keep all drains and latrines clean? Do they keep up the search for mosquito larvae?

It is also valuable to discuss possible improvements in teaching methods. Some teachers would like to have a group to consider the best ways of using posters in class work. Right—we will fix that up before the next month's programme starts. With a group of teachers who are always out to improve their standards of teaching there is no limit to the progress that can be made in this sort of evaluation group.

That is the health education programme as attempted by the people at Medak. We have only been in action for a few months, so we cannot afford to be too dogmatic about our methods or our successes. We sincerely believe, however, that we are on the right track.

A PROGRAMME OF HEALTH EDUCATION IN UGANDA

Health education in Uganda is designed to encourage a sense of both individual and corporate responsibility for improvement in standards of health, and to explain the causes of disease. While there cannot be full appreciation of the aims and methods of the Medical Department till rationalism replaces mysticism in local conceptions of disease causation, improvements in hygiene can be obtained by the use of authority and with the co-operation born of the fear of epidemic disease, which is familiar to all at an early stage of sanitary progress. However, such improvements tend to be transient as, with the control of major epidemic diseases, the spur of fear is rapidly forgotten. This stage has been reached in Uganda, and the stability of further advance will bear a direct relationship to the degree of understanding which is imparted.

Health problems in Uganda can be divided into two broad groups, environmental sanitation and domestic hygiene. Improvement in environmental sanitation, that is, in housing, water supplies, latrine construction and rubbish disposal, mostly require the efforts of the male members of an African society. Advances in domestic hygiene, that is, clean food, good diet and infant care, can only be achieved through the education of women to a better appreciation of the value of such measures.

Until quite recently the main effort has been directed towards the environmental problem. Assistant Health Inspectors (Africans) have been posted to rural areas where they work in close collaboration with the chiefs and local government institutions. At first their approach to health education was largely confined to the instruction of individual householders, but as representative local government councils have developed, the more important part of their work has been directed towards the education of these agencies so as to make sanitary improvement popular in the areas concerned. It has been to assist in this later objective that the health week technique has been developed.

The stage has already been reached when these health weeks are requested and in part organized by the local government councils. They provide a programme of lectures, demonstrations and film shows for from 100 to 200 leaders of local opinion. The programmes have been steadily widened to include instruction in hygiene, agriculture, animal husbandry, mass literacy, and the work of co-operative societies. An attempt should be made to secure co-ordinated advances in these various fields if the goal of an improved standard of living is to be achieved.

Experience has proved that hygiene instruction by modern methods is of very limited or even negligible value unless it is followed up by the older technique of systematic inspection by trained African staff. The reports of Assistant Health Inspectors must be regularly presented to the African councils and be the subject of detailed and patient discussion. We have learned that rapid improvements in environmental hygiene are only achieved and the object of these changes understood when information is carefully presented by modern methods, and where there are enthusiastic chiefs, efficient Assistant Health Inspectors, and an energetic local government council.

For many years, instruction in domestic hygiene has been provided in

African girls' schools and for women attending infant welfare clinics attached to maternity units. Some progress has been achieved in these ways but the theory expounded has too often failed to find adequate expression in the African home. It will be necessary to follow up and reinforce these methods by the use of trained African women working as Health Visitors. In 1951 one trained nurse-midwife began such duties in a rural area. The early results of her advice in the homes is encouraging and her experience will help in guiding the development of this important aspect of health education.

HEALTH EDUCATION ABSTRACTS

A current issue of Unesco's Education Clearing House, 'Occasional Papers in Education',[1] contains a series of abstracts of articles and books on health education. This publication was prepared as a joint venture between Unesco and WHO. It is anticipated that it will be of interest to all workers in the field of health education and of particular value to those working in areas inaccessible to libraries.

SIGNIFICANT EXPERIENCES OF NURSES PARTICIPATING IN HEALTH EDUCATION

The public health nursing team in the Philippines has arranged for some training for elementary school teachers, and every teacher in the demonstration area has attended a health teaching course. Its object is to keep elementary school teachers informed of modern trends in public health. The courses include: phases in a school health programme; common defects among school children; dental hygiene; control of communicable diseases; nutrition; health education-methods and subject; audio-visual education. The conference and discussion methods are used during the course.

In addition, a course for home-makers has been arranged, designed for housewives and future wives, and covering a period of eight to ten weeks. Lectures are given in Tagalog (the national language), and include such topics as hygiene during pregnancy, nutrition in the family, child guidance, food preparation, home nursing care, first aid and audio-visual education.

Public health nurses working in Central India, during the first months, devoted 90 per cent of their time to work in connexion with malaria and only about 10 per cent to health education. Later these proportions were reversed and the nurses were able to spend about 90 per cent of their time in actual public health work in this area, which covers about 50,000 people. With the co-operation of village headmen and teachers, health teaching was effected by home visits and teaching in clinics, and received special emphasis in the schools, where children introduced for the first time to latrines quickly learned to use them.

In the rural area outside Delhi, nurses have arranged for health teaching in maternity and child centres—for fathers as well as for the mothers. In co-operation with college students, a health exhibition was arranged in a small village.

A definite school health programme has been established. In some schools, a 50 per cent pediculosis rate was reduced during one year to 4 per cent. A

1. Unesco. *Health Education: A Selected Bibliography* (Occasional Papers in Education, No. 11), Paris, 1951. 56 pp. Free. Published also in French and Spanish.

health education van is making field trips twice a month; filmstrips are shown, group teaching arranged, and refresher courses for nurses held.

Maternal and child health exhibitions have been arranged in different towns. Young mothers have been learning how to use a needle and make baby clothes, and four village women asked for midwifery training. Three of these have now started on their one-year course.

HEALTH EDUCATION IN HAITI

Emphasis during the recent health education mission to Haiti was focused on (*a*) the development of a public health education consciousness in official circles; (*b*) demonstrations of the need for and effectiveness of health education programmes in rural schools and communities; (*c*) in-service training of public health and public education personnel; and (*d*) the launching of a simple visual aids production project designed to develop and prepare materials adaptable to the public health needs of the Haitian people.

Health education as a preventive measure is of particular concern to leaders among the Haitian people. Budgetary and personnel considerations have made the Haitian Government aware of the need to continue and expand all endeavours in this respect, such as were recently initiated with WHO assistance.

LOMBARDY REGIONAL CENTRE FOR EDUCATION OF THE PUBLIC IN HEALTH AND HYGIENE

The Lombardy Regional Centre for the Education of the Public in Health and Hygiene was created at Milan on 14 January 1951 under the auspices of the National Centre for Social Defence and Prophylaxis, with the collaboration of many well-known figures in the medical and pedagogical world as well as in the magistrature. The centre carries out co-ordinating work between the various associations with health and social aims, as well as its own activities in various fields of applied hygiene: prophylactic propaganda through the cinema, press and radio; work among schoolchildren; training of educationists; technical control of an educational periodical for spreading basic ideas on hygiene among children in an agreeable form; talks and exhibitions, etc.

The centre is subsidized by the provincial administration while awaiting financial support from the Government. The President is Professor Piero Redaelli and the Secretary-General Professor Cesare Ducrey, the founder of the movement.

INTERNATIONAL UNION FOR HEALTH EDUCATION OF THE PUBLIC

An International Health Education Conference at which twenty-three countries were represented was held in Paris on 29, 30 and 31 May 1951, with the object of forming a non-governmental international union for the health education of the public. The conference was organized through the initiative of the French Organization for Health Education under the leadership of Mr. Lucien Viborel, Director of Health Education in the French Ministry of Health.

This union would work on the lines of such organizations as the International Union Against Tuberculosis, International Council of Nurses, World Medical Association, International Union against Cancer and the World Federation for Mental Health. It would seek to provide a medium for the collaboration of

persons professionally engaged in the health education of the public in all parts of the world. Like the non-governmental organizations mentioned above, it would seek to establish liaison with the World Health Organization and would work co-operatively with the WHO Section on the Health Education of the Public.

At the Paris meeting it was decided to move toward the establishment of such a Union by naming an Interim Commission to develop detailed plans and a proposed constitution for adoption at the next meeting, to be held in a year or so. Professor C. E. Turner was appointed Chairman and Mr. Lucien Viborel Secretary of the Interim Commission. Paris was selected as the headquarters of the Union.

The countries represented at the Paris meeting were: Belgium, Brazil, Cambodia, Egypt, Germany, Greece, Haiti, India, Iran, Iraq, Italy, Laos, Lebanon, Monaco, the Netherlands, Portugal, Salvador, Switzerland, United Kingdom, United States of America, Union of South Africa, Uruguay, Viet-Nam.

The following additional countries had replied earlier to a letter asking their reactions as to the desirability of an International Union: Australia, Austria, Burma, Canada, Chile, Cuba, Denmark, Ecuador, Ireland, Israel, Luxembourg, Norway, Pakistan, Saudi Arabia, Southern Rhodesia, Thailand, Turkey, Venezuela, Yugoslavia.

Provisional headquarters of the Secretariat: Mr. Lucien Viborel, Secretary-General International Union for Health Education of the Public, 7 rue de Tilsitt, Paris-17e, France.

ECA HEALTH EDUCATORS IN SOUTH-EAST ASIA

Health educators are now assigned to the health divisions of the ECA missions to Viet-Nam, Burma and Thailand, and another is planned for the Philippines. John E. Baker arrived in Viet-Nam in March 1951; Verne C. Reierson began work in Burma in May 1951 and was joined by Alfred L. Scherzer in November 1951; Robert C. Milligan reached Thailand in July 1951.

The health educators are for the most part working on general programmes. However, both Viet-Nam and Thailand have specific projects devoted to health education on which the health educator concentrates his efforts.

The various activities in which the public health educator assists both the mission and local staff include demonstrations of community organizations in villages to carry on local health programmes, training national workers to do similar types of work, planning for training of local professional and technical personnel, and preparing materials for use in local health programmes.

HEALTH EDUCATION PROGRAMMES OF THE INSTITUTE OF INTER-AMERICAN AFFAIRS

The Institute of Inter-American Affairs, an agency of the United States Government, is co-operating with seventeen Latin American countries in carrying out health and sanitation programmes.

Health education, a major activity in each of the programmes, is being carried forward as an organized project by the Co-operative Health Services in eleven of the Latin American countries; in the others, health education activities are carried out in connexion with other projects.

The aim of the health education work is to inform the populations of these countries as widely and effectively as possible of the more elementary facts of

personal hygiene and health protection. A wide variety of techniques is used. Articles, stories, comic strips and other items are prepared for the newspapers. Short talks are presented from time to time over national and local radio stations. Illustrated pamphlets are prepared and distributed. Because of the widespread illiteracy in many of these countries, particular emphasis is placed on visual presentation. Documentary movies on health subjects are shown in outlying rural areas. Simple posters and charts are widely used. A large part of the work is carried out through the schools, in close collaboration with the Inter-American Co-operative Education. More recently, emphasis has been placed on community organization for health education under the leadership of trained professional health educators. The Institute has assigned such personnel to Brazil, Chile, and Peru. In these countries health educators are working actively with the Ministries of Health to develop broad community health education programmes.

Altogether, since 1942, millions of people throughout Latin America have been reached in one way or another by health education activities.

PRE-TESTING OF HEALTH EDUCATION MATERIALS AND EVALUATION OF EXHIBITS

The shifting emphasis in the United States from environmental health control to preventive medicine has led to an increased recognition and use of public health education. At the same time there has arisen the need to investigate the problems involved in making health education more effective. The Public Health Service recognized this need when in 1948 it set up the Experimental and Evaluation Services Branch within the Division of Public Health Education. A growing demand for the services of this branch has led to expansion of both staff and fields of interest.

This branch provides a variety of pre-testing and evaluation services, and consultation in relation to health education programmes with the various units within the services as well as with other official agencies and private health groups. It has also begun to explore the problems of motivation and behaviour as related to more effective health education practice.

Human interest and easy comprehension are the considerations borne in mind with regard to pamphlets, filmstrips, and other health materials while still in preparation. There are interviews to obtain the reactions of the people for whom materials are intended. Changes made in accordance with findings help to make the material easier to understand and more interesting.

The branch has also evaluated the effectiveness of different methods, materials and programmes in achieving their objectives. In one study, two different methods used for instructing diabetics about self-care were measured as to their relative effectiveness in increasing the patient's knowledge about diabetes. Scientific exhibits at a public health meeting were evaluated for their effectiveness, both from the exhibitor's and the observer's points of view. A nutrition programme designed to increase the milk consumption of rural low-income families was tested to discover how far in fact the families were using more milk.

Studies of behaviour which are now proceeding will provide data upon which more effective planning and operation of health programmes can be based. One study is attempting to identify the principles of community organization most effective in encouraging communities to solve health problems. Another is concerned with determining the behaviour of people towards tuberculosis as a basis for more precise education and programme emphasis. Why sanitary

engineers leave their profession is another subject of research. A future study will explore ways of inducing people to use local health department resources for the control of chronic disease.

PILOT PROJECT IN HEALTH EDUCATION IN EGYPT

An unusual experiment in health education took place last summer in three of Egypt's 111 rural social centres. Aimed at stimulating the mother to be the health guardian of the family, this pilot project used girl social workers for the first time in villages.

In each community the health committee of local leaders, co-operating with other community agencies, raised a working fund of £E500, and the first step was to draw up a list of the most pressing problems: lack of latrines, lack of windows in houses, bad water supplies, trachoma, stabling of animals in houses, bathing in irrigation canals, risks of infection.

Unorthodox methods, born of the novel situation, were used in dealing with these problems. To interest the villagers, photographs were taken of them dealing with these problems in an effective way. If it meant cutting a window, the committee paid half and the home-owner the other half, doing the work himself. Photographs proved so popular that they were made of families who achieved the most, and presented to them.

The aim was to take constructive action on felt needs which could be met with few resources. The social workers used direct teaching methods. Home visits were carefully planned and proved to be highly successful in inducing mothers to change old habits of bad health. The programme was carefully recorded for use in future planning.

Its success was evident when village committees—all men—expressed interest in having professional women social workers in future. Some sheikhs expressed the opinion that for such a job a woman was better.

Three Government departments participated: the Ministry of Social Affairs through the Fellah Department, the Ministry of Education through the Higher Institute for Social Work for Girls, and the Ministry of Health through the WHO Venereal Disease Control Demonstration Centre, whose role was one of co-ordination.

A village health committee with social workers visits another village which has a pump for the water supply to see how it is installed and to discuss costs with their neighbours.

CENTRAL COUNCIL FOR HEALTH EDUCATION SUMMER SCHOOL

The Summer School of the Central Council for Health Education was held at Winchester, England, from 22 August to 1 September 1951. The school had two objects:

1. To study the principles, teamwork and technique of health education in the family, the school, the hospital and industry; and
2. To bring together field workers in health education to discuss their work and the relationship between the various health education projects.

Eighty-one students, representing the medical, nursing, teaching and allied professions, and coming from fifteen different countries, spent ten days discussing the theory and practice of health education under the guidance of experienced tutors. Two methods of discussion were used. For one set of discussions the various professions were mixed, and for another set the professions were grouped homogeneously; it was considered by most that the greatest value was derived from the mixing of the professional groups. The unique feature which a Summer School such as this can provide is precisely the exchange of experience between professional workers who do not normally meet.

Sessions were also conducted in techniques, at which all modern means were described and discussed. Particular sessions were devoted to visual techniques, and a large selection of the best modern films were shown. One hour each day was devoted to practice in some of the newer methods of group discussion. In these democratically led groups an attempt was made to investigate the more important underlying psychological factors that arise between members of a group involved in teamwork.

The ten days' discussion ended with evaluation sessions for all types of groups, in which free and frank criticism and suggestions were made and the value of the course assessed.

Conclusions

Though many would have preferred more lectures, the tutorial discussion method adopted was approved by the majority. It was felt that the methods sometimes referred to as 'Group Dynamics' require a longer period than ten days if resolution of conflicts is to take place and serious benefit result. In spite of this, one group was satisfied that their 'group dynamic' sessions had explained to them some of the fundamentals of group behaviour. The free and frank criticism which concluded the school was testimony to the seriousness and co-operation with which the students had treated the proceedings.

The School was under the direction of Dr. John Burton and the tutors were Professor Fraser Brockington, Dr. J. L. Burn, Mr. Cyril Bibby, M.A., M.Sc., F.L.S., Mrs. L. E. Herbert, Mr. H. Phillipson, B.A., and members of the Central Council's staff, Dr. Anne Burgess and Mr. C. A. P. Noseworthy.

The Summer School of 1952 will be held on similar lines, from 5 to 16 August, at Clacton, England.

SOCIETY OF PUBLIC HEALTH EDUCATORS (SOPHE)

The Society of Public Health Educators was officially created on 27 October 1950 at a meeting at St. Louis, Missouri, U. S. A.

It consists at present of fifty-three charter members and four elected members from the U.S.A., Brazil, Canada, Chile, Hawaii, Puerto Rico, and Switzerland.

Developing as the result of specific needs recognized by leaders in the field, the Society was founded only after two years of work and study. These needs

were listed at a 1949 meeting as: discussion of professional problems; professional leadership; publication media; professional representation; establishment and promulgation of standards; guidance in professional education; expansion and growth in the field; professional ethics; research.

The purpose of the Society is 'to contribute to the advancement of the health of all people by encouraging study, improving practices and elevating standards in the profession of public health education'. Under the leadership of its second president, Dr. Mayhew Derryberry,[1] the Society carries on its work largely through four standing committees on eligibility, publications, research and standards, and nominations, and such other committees as from time to time become necessary. Membership consists of Active Fellows and Honorary Fellows.

The Society has recently published an interesting booklet containing an account of its origin and activities to date, a copy of the Constitution and by-laws and a directory. This can be secured from Health Publications Institute, Inc., 216 N. Dawson Street, Raleigh, North Carolina, U.S.A. for 50 cents American. Enquiries will also be welcomed by the Secretary, Mr. J. Louis Neff, 2307 Helena Street, Houston 6, Texas, U.S.A.

Further information on the items described in the notes and records section can be obtained from the following:

A Programme of Health Education in Uganda:
Dr. R. G. Ladkin, Provincial Medical Officer's Office, Buganda Province, P.O. Box 139, Kampala, Uganda.

Health Education Abstracts:
Education Clearing House, Unesco;
Health Education Section, WHO, Palais des Nations, Geneva.

Significant Experiences of Nurses Participating in Health Education:
Nursing Section, WHO.

Health Education in Haiti:
Mr. Leon J. Bickham, Health Educator with WHO.

Lombardy Regional Centre for Education of the Public in Health and Hygiene:
Professor C. Ducrey, Regional Centre, via Larga 6, Milan, Italy.

International Union for Health Education of the Public:
Mr. Lucien Viborel, Director, Centre National de l'Éducation sanitaire, 66 boulevard Saint-Michel, Paris, France.

ECA Health Educators in South-East Asia:
Dr. Mayhew Derryberry, Chief, Division of Public Health Education, U.S. Public Health Service, Washington 25, D.C., U.S.A.

Health Education Programmes of the Institute of Inter-American Affairs:
Division of Health and Sanitation, Institute of Inter-American Affairs, Washington 25, D.C.,U.S.A.

Pre-testing of Health Education Materials and Evaluation of Exhibits:
Dr. Andie L. Knutson, Chief, Experimental and Evaluation Services Branch, Division of Public Health Education, U.S. Public Health Service, Washington 25, D.C., U.S.A.

Pilot Project in Health Education in Egypt:
Mr. Robert L. Bogue, Health Educator with WHO, Geneva.

Central Council for Health Education Summer School:
Dr. John Burton, Medical Director, Central Council for Health Education, Tavistock Square, London, W.C.1.

Society of Public Health Educators:
Mr. Louis Neff, Society of Public Health Educators, 2307 Helena Street, Houston 6, Texas, U.S.A.

1. First President: Dr. Clair E. Turner.

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CONTENTS

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